



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

100

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,636	12/13/2001	Martin Reif	IN-12101	5951
7590	07/02/2004		EXAMINER	
Basf Corporation Patent Department 1419 Biddle Avenue Wyandotte, MI 48192-3736				ZUCKER, PAUL A
			ART UNIT	PAPER NUMBER
			1621	

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/018,636	REIF ET AL.	
	Examiner	Art Unit	
	Paul A. Zucker	1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12 April 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-6,10-19,25 and 26 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-6,10-19,25 and 26 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12 April 2004 has been entered.

Current Status

2. This action is responsive to Applicants' amendment of 12 April 2004.
3. Receipt and entry of Applicants' amendment is acknowledged.
4. Applicant's cancellation of claims 7-9 and 20-24 is acknowledged.
5. Applicant's addition of new claims 25 and 26 is acknowledged.
6. Claims 1-6, 10-19, 25 and 26 are pending.
7. The objection to the specification set forth in paragraph 2 of the previous Office Action in Paper No 5 is withdrawn in response to Applicant's remarks.
8. The rejection under 35 U.S.C. 112, second paragraph, set forth in paragraph 9 of the previous Office Action in Paper No 8 is withdrawn in response to Applicants' amendment.
9. The objection to the specification set forth in paragraph 10 of the previous Office Action in Paper No 10 is withdrawn in response to Applicant's amendment.

Rejections

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

10. Claims 1-6, 10-19 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamamoto et al (US 4,193,932 03-1980).

Yamamoto discloses (Column 4, line 46 – column 5, line 5) a process for the reaction of diaminodiphenylmethane with phosgene to give isocyanate. Yamamoto implicitly discloses the steps required for providing the required phosgene (i.e. introducing it into the reaction). Yamamoto discloses (Column 4, lines 48-56) a two-stage process for the reaction of diaminodiphenylmethane with phosgene in chlorobenzene (an inert solvent), reacting with an excess of phosgene below 20°C and again at 150°C at atmospheric pressure (presumed). Yamamoto discloses (Column 3, lines 48-49) the formation of 1,6-hexamethylene diisocyanate.

Yamamoto is silent with regard to the bromine content of the phosgene employed and so no bromine is considered to be present. Yamamoto thus anticipates instant claims 1-6, 10-19 and 24.

Examiner's Response to Applicants' Remarks with Regard to This Rejection

11. Applicants have presented arguments with regard to this rejection. The Examiner responds to these below:

- a. Applicants argue that it is unclear how the Office can consider bromine and/or iodine not to be present in the Yamamoto process given that no information concerning the impurities is given in Yamamoto. The Examiner responds that it is precisely for the reason that Yamamoto gives no impurity information that the Office *must* consider bromine and/or iodine not to be present since there is no objective evidence for the alternative point of view.
- b. Applicants argue that since a clean-up procedure using HCl is required, the phosgene of Yamamoto must contain bromine. The Examiner disagrees. The discoloration of the product of Yamamoto might have any of a number of sources. An example of such might be an impurity in the starting amine mixture. Even if one were to assume that the discoloration of Yamamoto's product were due to bromine there is no way to determine the level of bromine present in Yamamoto's phosgene based on Yamamoto alone.
- c. Applicants argue, in summary, that Yamamoto employs phosgene having the usual high bromine and iodine levels and teaches a cleaning step in order to obtain a clear product while Applicants' process does not require a cleaning step. To this the Examiner responds:
 - i. There is no objective evidence on the record to date that the levels of bromine and/or iodine in commercial phosgene prior to the filing date of the instant application exceed the instantly claimed level.

NOTE: Applicants are invited to submit objective evidence to this effect for the Examiner's consideration;

- ii. In response to Applicant's argument that the references fail to show certain features of Applicant's invention, it is noted that the features upon which Applicants rely (i.e., no cleaning step required) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant's arguments filed 12 April 2004 have been fully considered but they are not persuasive for the reasons discussed above.

12. Claims 1-3, 5,6, 10, 13-19 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmitt et al (US 3,916,006 10-1975).

Schmitt discloses (Column 4, lines 40-64) the use of a phosgenation process to make isophorone diisocyanate (1-isocyanato-3-(isocyanatomethyl)-3,5,5-trimethylsyclohexane). Schmitt carries out his reaction in chlorobenzene as solvent in a two-stage process presumably at atmospheric pressure. Schmitt is silent with regard to the bromine content of the phosgene employed and so no bromine is considered to be present. Schmitt thus anticipates instant claims 1-3, 5,6, 10, 13-19 and 25.

Conclusion

13. Claims 1-6, 10-19, 25 and 26 are pending. Claims 1-6, 10-19, 25 and 26 are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A. Zucker whose telephone number is 571-272-0650. The examiner can normally be reached on Monday-Friday 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul A. Zucker, Ph. D.
Patent Examiner
Technology Center 1600